

**LISTING AND AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**What is claimed is:**

1. (currently amended) A radiation diversity antenna ~~consisting of comprising~~ a radiating element of the slot-line type coupled electromagnetically to a feed line, wherein the radiating element consists of arms in a tree structure, each arm having a length equal to  $k\lambda_s/2$  where  $k$  is an ~~identical or different integer from one arm to the next~~ and  $\lambda_s$  is the guided wavelength in the slot-line constituting the arm, at least one of the arms comprising a switching means positioned in the slot-line constituting the said arm in such a way as to control the coupling between the arm and the feed line (6) as a function of a command.

2. (original) The antenna of claim 1, wherein each arm comprises a switching means.

3. (original) The antenna of claim 1, wherein the switching means is positioned in an open-circuit zone of the slot.

4. (original) The antenna of claim 2, wherein the switching means is positioned in an open-circuit zone of the slot.

5. (original) The antenna of claim 1, wherein the switching means consists of a diode, a transistor arranged as a diode or an MEMS (Micro Electro Mechanical System).

6. (original) The antenna of claim 1, wherein each arm has a length which is delimited by an insert positioned in a short-circuit plane.

7. (original) The antenna of claim 5, wherein the insert is placed at the level of the junctions between arms.

8. (original) The antenna of claim 1, wherein the tree structure has an H or Y shape or one which is an association of these shapes.

9. (original) The antenna of claim 1, wherein the antenna is produced by microstrip technology or by coplanar technology.

10. (original) The antenna of claim 1, wherein the length of the slot-lines is chosen so as to produce frequency diversity.

11. (new) An antenna comprising:  
a substrate having a first side and a second side;  
a first conductive layer disposed on said first side of said substrate;  
a plurality of radiating elements etched into said first conductive layer, each of said plurality of radiating elements;  
a feed line disposed on said second side of said substrate such that said feed line electromagnetically couples to at least one of said plurality of radiating elements; and  
a switching means coupled into at least one of said plurality of radiating elements to control the electromagnetic coupling between said feed line and said radiating element.

12. (new) The antenna of claim 11 wherein each of said plurality of radiating elements has a length equal to an integer multiple of the guided wavelength of said radiating element.

13. (new) The antenna of claim 11 wherein said plurality of radiating elements comprises 5 radiating elements forming an H pattern.

14. (new) The antenna of claim 11 wherein each of said plurality of radiating elements comprises a switching means.

15. (new) The antenna of claim 11 wherein said switching means is positioned in an open-circuit zone of the slot.

16. (new) The antenna of claim 11 wherein the switching means comprises a diode.

17. (new) The antenna of claim 11 wherein the switching means comprises a transistor.

*18*  
~~16~~. (new) The antenna of claim 11 wherein the switching means comprises a micro electro mechanical system.

*19*  
~~18~~. (new) The antenna of claim 11 wherein each of said plurality of radiating elements has a length which is delimited by an insert positioned in a short circuit plane.

*20*  
~~19~~. (new) The antenna of claim 11 wherein the length of each of said plurality of radiating elements is chosen as to produce frequency diversity.

*Rule  
1126*